

Listing of Claims:

1. (Previously Presented) An electrode structure comprising a first catalytic component and a second catalytic component, wherein:

- (a) said first catalytic component comprises one or more electrocatalyst(s) of formula Pt-Y, wherein Y is Mo, W or an oxide of Mo or W; and
- (b) said second catalytic component comprises one or more electrocatalyst(s) of formula Pt-M, where M is a metal alloyed with the platinum and is one or more metals selected from the group consisting of Ru, Rh, Ti, Cr, Mn, Fe, Co, Ni, Cu, Ga, Zr, Hf and Sn; and

wherein the first and second catalytic components are in ionic contact with each other.

2. (Previously Presented) An electrode structure according to claim 12 wherein X is selected from the group consisting of Ru, Mn, Co, Ni, and Rh.

3. (Previously Presented) An electrode structure according to claim 1, wherein M is selected from Ru or Rh.

4. (Previously Presented) An electrode structure according to claim 1, wherein the first catalytic component is selected from the group consisting of: Pt/Mo, Pt/Mo/Co, Pt/W/Co, Pt/Ru/WO₃ and Pt/Ti/W; and the second catalytic component is Pt/Ru.

5. (Previously Presented) An electrode comprising an electrode structure according to claim 1 wherein the electrocatalyst materials are present on one side of a gas diffusion material.

6. (Previously Presented) A catalysed membrane comprising an electrode structure according to claim 1 wherein the electrocatalyst materials are present on one side of a polymer electrolyte membrane material.

7. (Previously Presented) An MEA comprising an electrode structure according to claim 1.

8. (Previously Presented) An electrode according to claim 5, wherein the two catalyst materials are formulated into two separate layers.

9. (Previously Presented) An electrode according to claim 5, wherein the two catalyst materials are formulated into one mixed layer.

10 (Previously Presented) A fuel cell comprising an electrode structure, comprising a first catalytic component and a second catalytic component, characterised in that the first catalytic component comprises one or more electrocatalyst(s) of formula Pt-Y where Y is Mo, W, or an oxide of Mo or W, and the second catalytic component comprises one or more electrocatalyst(s) of formula Pt-M, where M is a metal alloyed with the platinum and is one or more metals selected from the group consisting of Ru, Rh, Ti, Cr, Mn, Fe, Co, Ni, Cu, Ga, Zr, Hf and Sn, and wherein the first and second catalytic components are in ionic contact with each other.

11. (Canceled)

12. (Previously Presented) An electrode structure according to claim 1 wherein said first catalytic component comprises a third metal component X which is alloyed with the platinum and which is one or more metals selected from the group consisting of Ru, Rh, Ti, Cr, Mn, Fe, Co, Ni, Cu, Ga, Zr, Hf and Sn.

13. (Previously Presented) A catalysed membrane according to claim 6 wherein the two catalyst materials are formulated into two separate layers.

14. (Previously Presented) A catalysed membrane according to claim 6 wherein the two catalyst materials are formulated into one mixed layer.

15. (Previously Presented) An MEA according to claim 7 wherein the two catalyst materials are formulated into two separate layers.

16. (Canceled)

17. (Previously Presented) An MEA according to claim 7 wherein the two catalyst materials are formulated into one mixed layer.

18. (Previously Presented) A fuel cell according to claim 10 wherein said first catalytic component comprises a third metal component X which is alloyed with the platinum and which is one or more metals selected from the group consisting of Ru, Rh, Ti, Cr, Mn, Fe, Co, Ni, Cu, Ga, Zr, Hf and Sn.